Name_____ Date_____

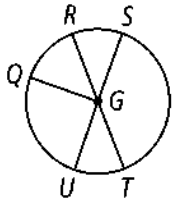
10.4 – Circumference and Arc Length

Name the following in $\odot G$.

1) the minor arcs

2) the major arcs

3) the semicircles



Find the measure of each arc in $\odot B$.

4) $\overset{\frown}{GJ}$

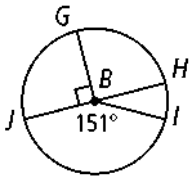
5) $\overset{\frown}{HI}$

6) $\overset{\frown}{HIJ}$

7) $\overset{\frown}{GJI}$

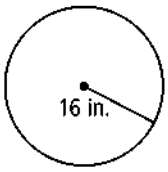
8) $\overset{\frown}{GHJ}$

9) $\overset{\frown}{GJH}$

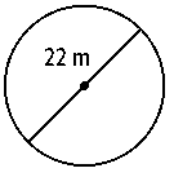


Find the circumference of each circle. Leave your answers in terms of π.

10)



11)



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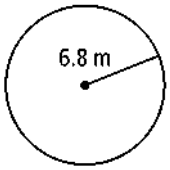


For the following, leave your answers in terms of π.

13) If $r = 10.5cm$, find C.

14) If $C = 25\pi$ cm, find r.

15) If $C = 9.6\pi$ cm, find d.

16) If $d = 12$ cm, find C.

17) What is the circumference of a circle whose radius is 30 cm?

18) What is the diameter of a circle whose circumference is 24π cm?

19) A square with sides that measure 2 cm is inscribed in a circle. Find the circumference of the circle.

20) A dinner plate fits snuggly in a square box with perimeter 48 inches. What is the circumference of the plate?

In the following, round your answer to the nearest 0.1 unit. Use the symbol $\approx$ to show that your answer is an approximation.

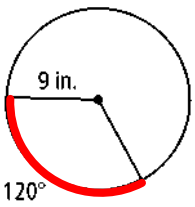
21) If d =9.6 cm, find C.

22) If r = 8.1 cm, find C.

23) If C = 132 cm, find d and r.

Find the length of each red arc. Leave your answer in terms of π.

24)



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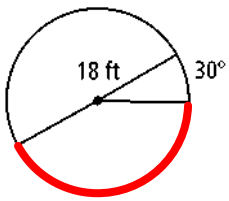

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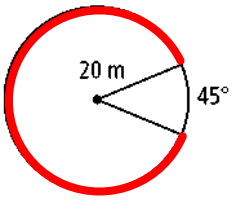

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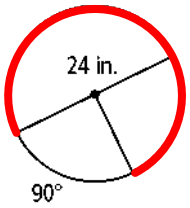
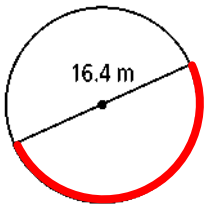


28)



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